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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/898,650	07/03/2001	John G. Apostolopoulos	10012168	9591

7590 06/28/2007
HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

KOENIG, ANDREW Y

ART UNIT	PAPER NUMBER
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2623

MAIL DATE	DELIVERY MODE
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06/28/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/898,650	Applicant(s) APOSTOLOPOULOS ET AL.	
	Examiner Andrew Y. Koenig	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 14-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 14-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 27 March 2007 has been entered.

Response to Arguments

2. Applicant's arguments filed 27 March 2007 have been fully considered but they are not persuasive.

The applicant argues Matsushita does not teaches "said particular multiple description bitstream is stored" on a first server "based on a level service said first server is capable of providing" and redistributing said particular multiple description bitstream "to said second server because said second server is capable of providing a higher level of service than said first server." The examiner disagrees; Matsushita teaches media push engines (servers) adapting to network congestion by adding additional media push engines to compensate for their own local traffic (col. 4, ll. 28-46). Matsushita teaches each media push engine determines whether it is capable of serving the requested stream components, and can remove components (e.g. one of the multiple bitstreams), and another server (with lower congestion – thereby capable of

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providing a higher level of service) will supply this missing component (e.g. the particular multiple description bitstream) (see fig. 7-8, col. 8, ll. 52-58, col. 9, ll. 12-17, col. 9, ll. 31-51, col. 10, ll. 16-22).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5-10, 12, 14-20, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0915598 A2 to Matsushita Electric Industrial Co., LTD (Matsushita) in view of U.S. Patent 7,062,250 to Kosaka.

Regarding claim 1, Matsushita teaches multimedia clients (16), a network connection for receiving a plurality of multiple description bitstreams (col. 4-5, ll. 58-4), which reads on a multiple description receiving portion, wherein the client inherently has a memory coupled to the receiving portion to store the plural bitstreams in respective portions, in order to process the signals separately from different network paths (col. 5-6, ll. 42-21).

Matsushita teaches adjusting the number of media push engines based upon network traffic congestion (col. 4, ll. 28-46), wherein said multiple description receiving portion receives a particular multiple description bitstream from a first server that said

particular multiple description bitstream is stored on based on a (at least one) level of service said first server is capable of providing, and said multiple description receiving portion potentially receives said particular multiple description bitstream at a later time from a second server because said particular multiple bitstream was redistributed to said second server because said second server is capable of providing a higher level of service than said first server (see fig. 7-8, col. 8, ll. 52-58, col. 9, ll. 12-17, col. 9, ll. 31-51, col. 10, ll. 16-22).

Matsushita teaches a reconstructing the components into a reconstructed stream (col. 5-6, ll. 42-21), which reads on a synchronization module coupled to the memory and adapted to blend the multiple bitstreams and a decoder for decoding the plural bitstreams. Matsushita teaches the client sending messages to the push engines which determines appropriate operation characteristics of the client in that the client enables the push engines to compensate for network congestion (col. 9, ll. 37-41), which reads on a source control module coupled to the synchronization module, wherein the module determines appropriate operation characteristics of the client. Further, Matsushita shows a computer (16), which clearly has a user interface device coupled to the decoder, wherein the interface presents the bitstreams to the user (col. 1, ll. 36-44, col. 5, ll. 10-12).

Matsushita teaches a source control module to make decisions on how many of the multiple bitstreams to receive (col. 9, ll. 37-41), but Matsushita is silent on monitoring power consumption by said client, wherein said client uses information about said power consumption to make a decision. Kosaka teaches monitoring power

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consumption by said client (fig. 1, label 11, col. 2, ll. 48-56) , wherein said client uses information about said power consumption to make a decision (col. 4, ll. 5-19, see also fig. 3: Kosaka teaches sending and receiving different amounts of data based upon the power of the client device, such as removing the video and maintaining the voice communication (col. 4-5, ll. 64-6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsushita by monitoring power consumption by said client, wherein said client uses information about said power consumption to make a decision as taught by Kosaka in order to reduce power consumption and increase communication periods (Kosaka: col. 1, ll. 41-44).

Regarding claim 2, Matsushita is silent on a mobile client. In analogous art, Kosaka teaches receiving video data over a channel of a wireless network, wherein the devices can be cellular phones (col. 2, ll. 34-38, col 3, ll. 29-38), which equates to a mobile device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsushita by using a mobile device as taught by Kosaka in order to provide video in different locations and thereby increasing desirable functionality to the user.

Regarding claim 3, Matsushita teaches a channel quality monitor for monitoring characteristics of channels from which the bitstreams are received (col. 9, ll. 37-41).

Regarding claim 5, Matsushita teaches a display device on a computer (label 16).

Regarding claim 6, Matsushita teaches presenting the stream (col. 10, ll. 20-22, col. 11, ll. 13-18), wherein the stream can be audio and/or video (col. 11, ll. 13-18), and must inherently have an audio output in order to present the stream to the user.

Regarding claim 7, Matsushita teaches transmitting information, related to the operation characteristics of the client to the push engines (col. 9, ll. 37-41).

Regarding claims 8, Matsushita teaches multimedia clients (16), a network connection for receiving a plurality of multiple description bitstreams (col. 4-5, ll. 47-4), which reads on receiving a first and second multiple description bitstreams at the client. Matsushita teaches the format of the data as using video, such as MPEG (col. 7, ll. 12-14), which inherently stores and decodes the bitstreams for presentation (col. 11, ll. 13-17). Matsushita teaches the client sending messages to the push engines which determines appropriate operation characteristics of the client in that the client enables the push engines to compensate for network congestion (col. 9, ll. 37-41), which reads on a source control module coupled to the synchronization module, wherein the module determines appropriate operation characteristics of the client. Further, Matsushita shows a computer (16), for presenting the bitstreams to the user (col. 1, ll. 36-44, col. 5, ll. 10-12).

Matsushita teaches a source control module to make decisions on how many of the multiple bitstreams to receive (col. 9, ll. 37-41), but Matsushita is silent on monitoring power consumption by said client, wherein said client uses information about said power consumption to make a decision. Kosaka teaches monitoring power consumption by said client (fig. 1, label 11, col. 2, ll. 48-56), wherein said client uses information about said power consumption to make a decision (col. 4, ll. 5-19, see also fig. 3: Kosaka teaches sending and receiving different amounts of data based upon the power of the client device, such as removing the video and maintaining the voice communication (col. 4-5, ll. 64-6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsushita by monitoring power consumption by said client, wherein said client uses information about said power consumption to make a decision as taught by Kosaka in order to reduce power consumption and increase communication periods (Kosaka: col. 1, ll. 41-44).

Regarding claim 9, Matsushita is silent on a mobile client. In analogous art, Kosaka teaches receiving video data over a channel of a wireless network, wherein the devices can be cellular phones (col. 2, ll. 34-38, col 3, ll. 29-38), which equates to a mobile device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsushita by using a mobile device as taught by Kosaka in order to provide video in different locations and thereby increasing desirable functionality to the user.

Regarding claim 10, Matsushita inherently stores the first and second bitstreams in respective memory portions in order to prevent data from being overwritten by another packet before being used.

Regarding claim 12, Matsushita teaches determining operation characteristics by monitoring the characteristics of channels on which said first and second streams are received (col. 9, ll. 37-41).

Regarding claim 14, Matsushita teaches adjusting operation characteristics by providing information to the push servers to accommodate for network congestion (col. 9, ll. 31-54).

Regarding claim 15, Matsushita teaches presenting the stream, wherein the stream is video (col. 11, ll. 13-18), which inherently uses a display.

Regarding claim 16, Matsushita teaches presenting the stream, wherein the stream is audio (col. 11, ll. 13-18), which inherently uses an audio output device.

Regarding claim 17, Matsushita teaches adjusting operation characteristics by providing information to the push servers to accommodate for network congestion (col. 9, ll. 31-54), which reads on transmitting information related to appropriate operation

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characteristics from the client to components (push servers) of a network to which the client is adapted to be communicatively coupled.

Regarding claim 18, Matsushita teaches multimedia clients (16), a network connection for receiving a plurality of multiple description bitstreams (col. 4-5, ll. 58-4), which reads on a multiple description receiving portion, wherein the client inherently has a memory coupled to the receiving portion to store the plural bitstreams in respective portions, in order to process the signals separately from different network paths (col. 5-6, ll. 42-21). Matsushita teaches a reconstructing the components into a reconstructed stream (col. 5-6, ll. 42-21), which reads on a synchronization module coupled to the memory and adapted to blend the multiple bitstreams and a decoder for decoding the plural bitstreams. Matsushita teaches the client sending messages to the push engines which determines appropriate operation characteristics of the client in that the client enables the push engines to compensate for network congestion (col. 9, ll. 37-41), which reads on a source control module coupled to the synchronization module, wherein the module determines appropriate operation characteristics of the client. Further, Matsushita shows a computer (16), which clearly has a user interface device coupled to the decoder, wherein the interface presents the bitstreams to the user (col. 1, ll. 36-44, col. 5, ll. 10-12, col. 11, ll. 13-18).

Matsushita teaches a source control module to make decisions on how many of the multiple bitstreams to receive (col. 9, ll. 37-41), but Matsushita is silent on monitoring power consumption by said client, wherein said client uses information about

said power consumption to make a decision. Kosaka teaches monitoring power consumption by said client (fig. 1, label 11, col. 2, ll. 48-56) , wherein said client uses information about said power consumption to make a decision (col. 4, ll. 5-19, see also fig. 3: Kosaka teaches sending and receiving different amounts of data based upon the power of the client device, such as removing the video and maintaining the voice communication (col. 4-5, ll. 64-6). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsushita by monitoring power consumption by said client, wherein said client uses information about said power consumption to make a decision as taught by Kosaka in order to reduce power consumption and increase communication periods (Kosaka: col. 1, ll. 41-44).

Regarding claim 19, Matsushita is silent on a mobile client. In analogous art, Kosaka teaches receiving video data over a channel of a wireless network, wherein the devices can be cellular phones (col. 2, ll. 34-38, col 3, ll. 29-38), which equates to a mobile device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsushita by using a mobile device as taught by Kosaka in order to provide video in different locations and thereby increasing desirable functionality to the user.

Regarding claim 20, Matsushita teaches a channel quality monitor for monitoring characteristics of channels from which the bitstreams are received (col. 9, ll. 37-41).

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Regarding claim 22, Matsushita teaches presenting the stream, wherein the stream is video (col. 11, ll. 13-18), which inherently uses a display.

Regarding claim 23, Matsushita teaches presenting the stream, wherein the stream is audio (col. 11, ll. 13-18), which inherently uses an audio output device.

Regarding claim 24, Matsushita teaches adjusting operation characteristics by providing information to the push servers to accommodate for network congestion (col. 9, ll. 31-54), which reads on transmission means coupled to said synchronization module, wherein the transmission means transmits information related to operation characteristics from the client to components (push servers) of a network to which the client is adapted to be communicatively coupled.

5. Claims 4, 11, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0915598 A2 to Matsushita Electric Industrial Co., LTD (Matsushita) and U.S. Patent 7,062,250 to Kosaka in view of "Error-Resilient Video Compression" (Apostolopoulos).

Regarding claim 4, Matsushita teaches audio and video, MPEG, JPEG, and H.261, but is silent on either MPEG-4 Version 2 with NEWPRED or H.263 Version 2 with RPS. In analogous art, Apostolopoulos teaches an error resilient encoder using MPEG-4 Version 2 with NEWPRED and H.263 Version 2 with RPS (pg, 185-186,

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section 3.4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsushita by using MPEG-4 Version 2 with NEWPRED or H.263 Version 2 with RPS as taught by Apostolopoulos in order to benefit from the already present error resilience capabilities of the standardized compression algorithms.

Regarding claim 11, Matsushita teaches audio and video, MPEG, JPEG, and H.261, but is silent on either MPEG-4 Version 2 with NEWPRED or H.263 Version 2 with RPS. In analogous art, Apostolopoulos teaches an error resilient encoder using MPEG-4 Version 2 with NEWPRED and H.263 Version 2 with RPS (pg, 185-186, section 3.4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsushita by using MPEG-4 Version 2 with NEWPRED or H.263 Version 2 with RPS as taught by Apostolopoulos in order to benefit from the already present error resilience capabilities of the standardized compression algorithms.

Regarding claim 21, Matsushita teaches audio and video, MPEG, JPEG, and H.261, but is silent on either MPEG-4 Version 2 with NEWPRED or H.263 Version 2 with RPS. In analogous art, Apostolopoulos teaches an error resilient encoder using MPEG-4 Version 2 with NEWPRED and H.263 Version 2 with RPS (pg, 185-186, section 3.4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Matsushita by using MPEG-4 Version 2 with

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NEWPREP or H.263 Version 2 with RPS as taught by Apostolopoulos in order to benefit from the already present error resilience capabilities of the standardized compression algorithms.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Y. Koenig whose telephone number is (571) 272-7296. The examiner can normally be reached on M-Fr (8:30 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571)272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Andrew Y Koenig
Primary Examiner
Art Unit 2623

ayk